

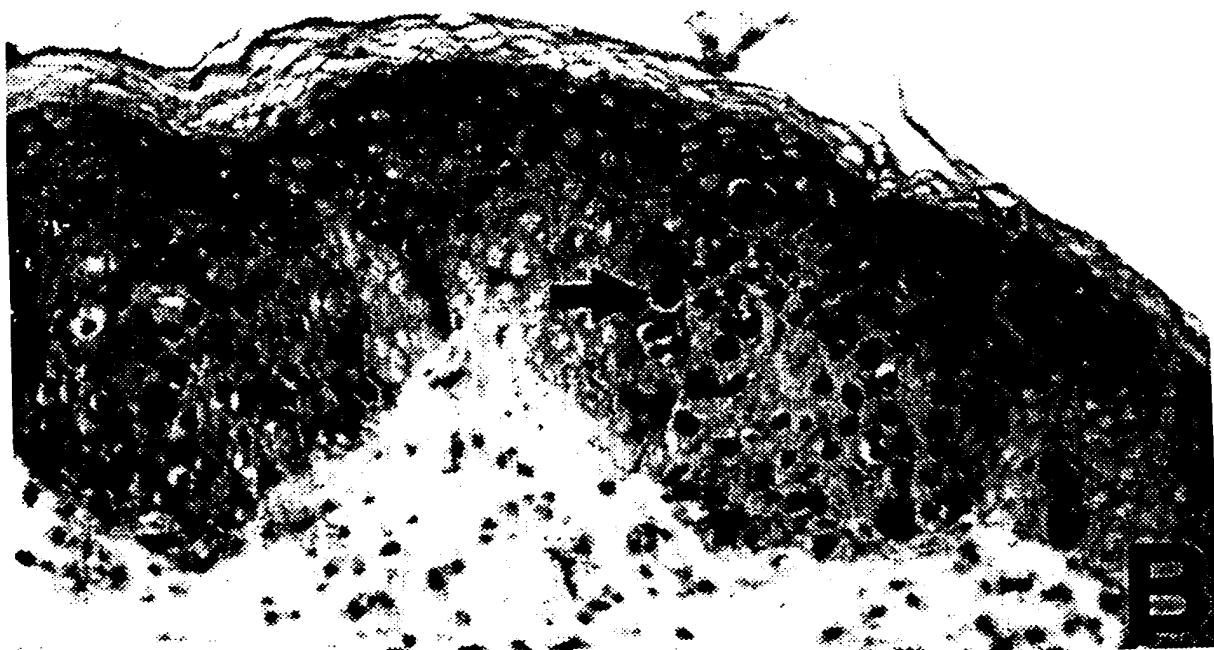
1/28

FIGURE 1A



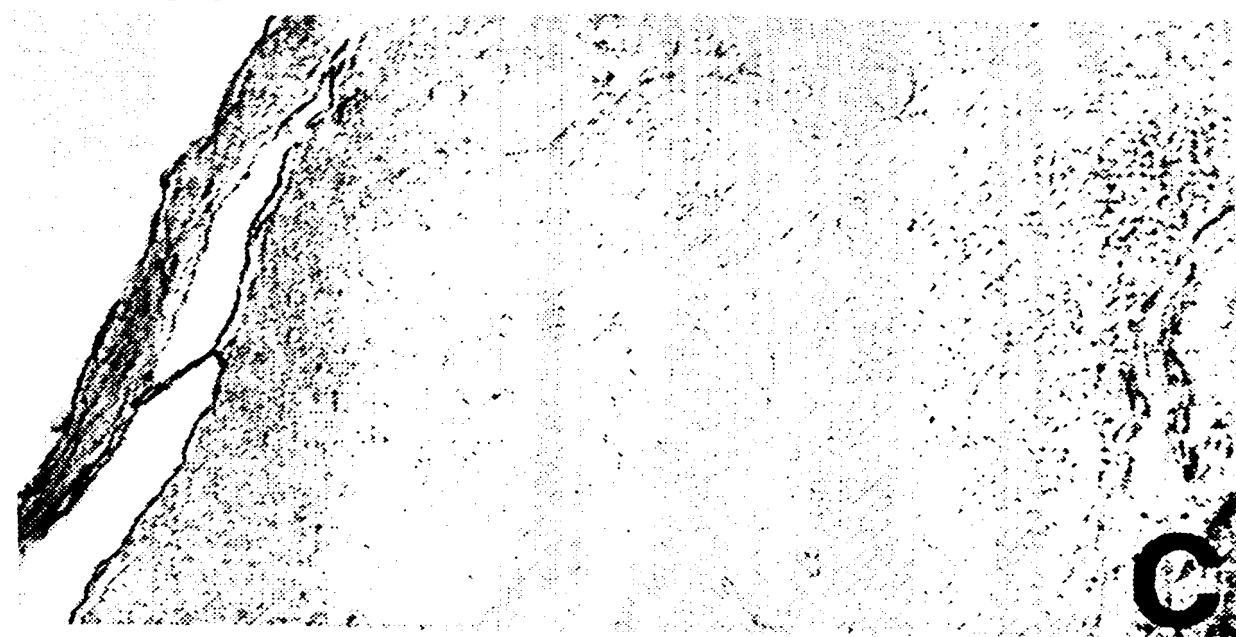
2/28

FIGURE 1B



3/28

FIGURE 1C



4/28

FIGURE 2A



5/28

FIGURE 2B



6/28

FIGURE 2C



7/28

FIGURE 2D



8/28

FIGURE 3A



9/28

FIGURE 3B



10/28

FIGURE 3C



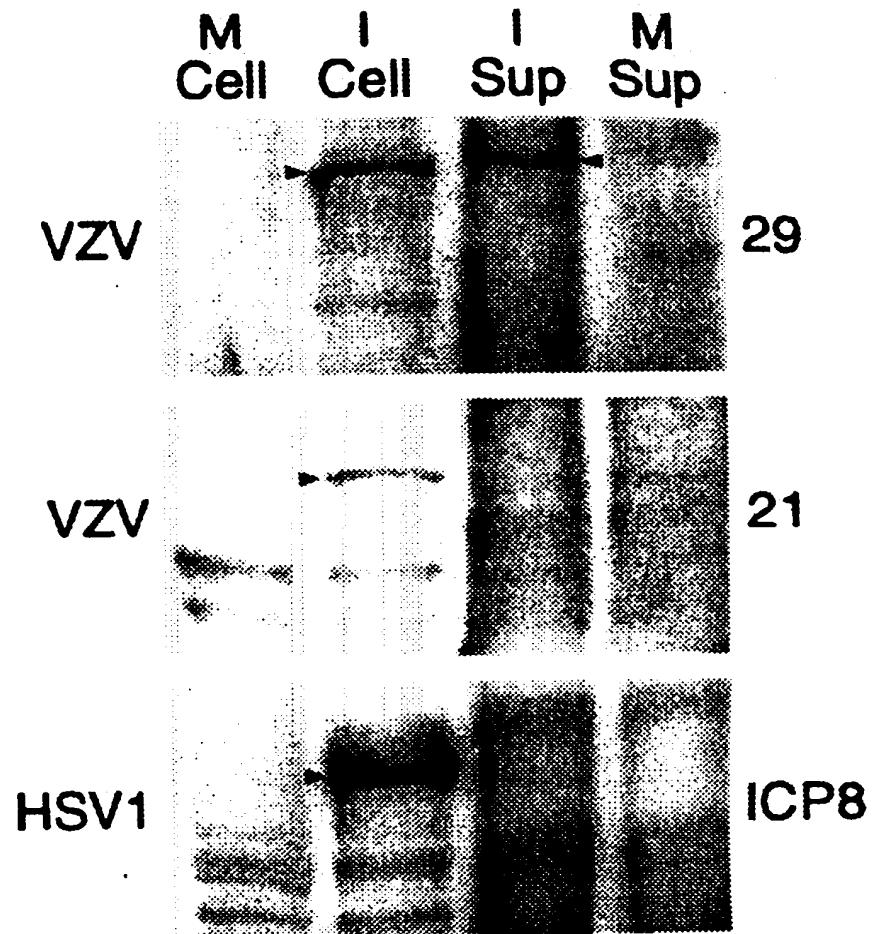
11/28

FIGURE 3D



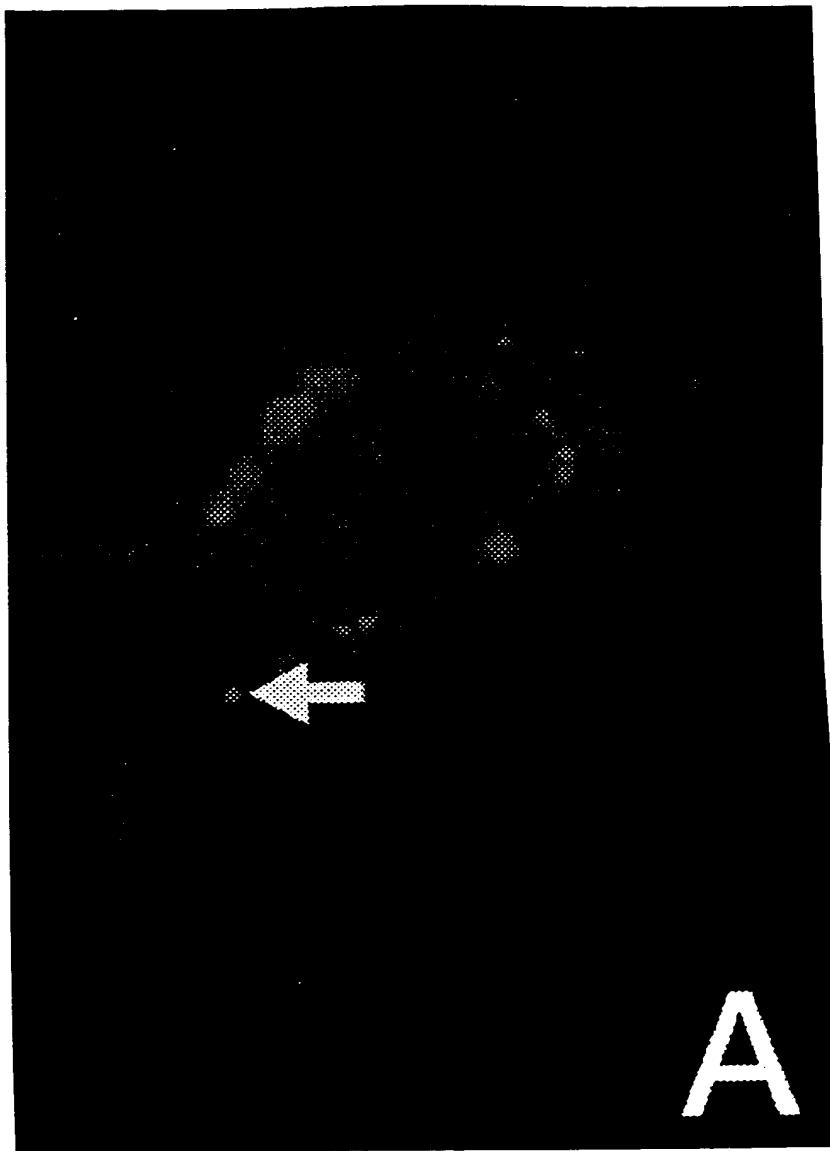
12/28

FIGURE 4



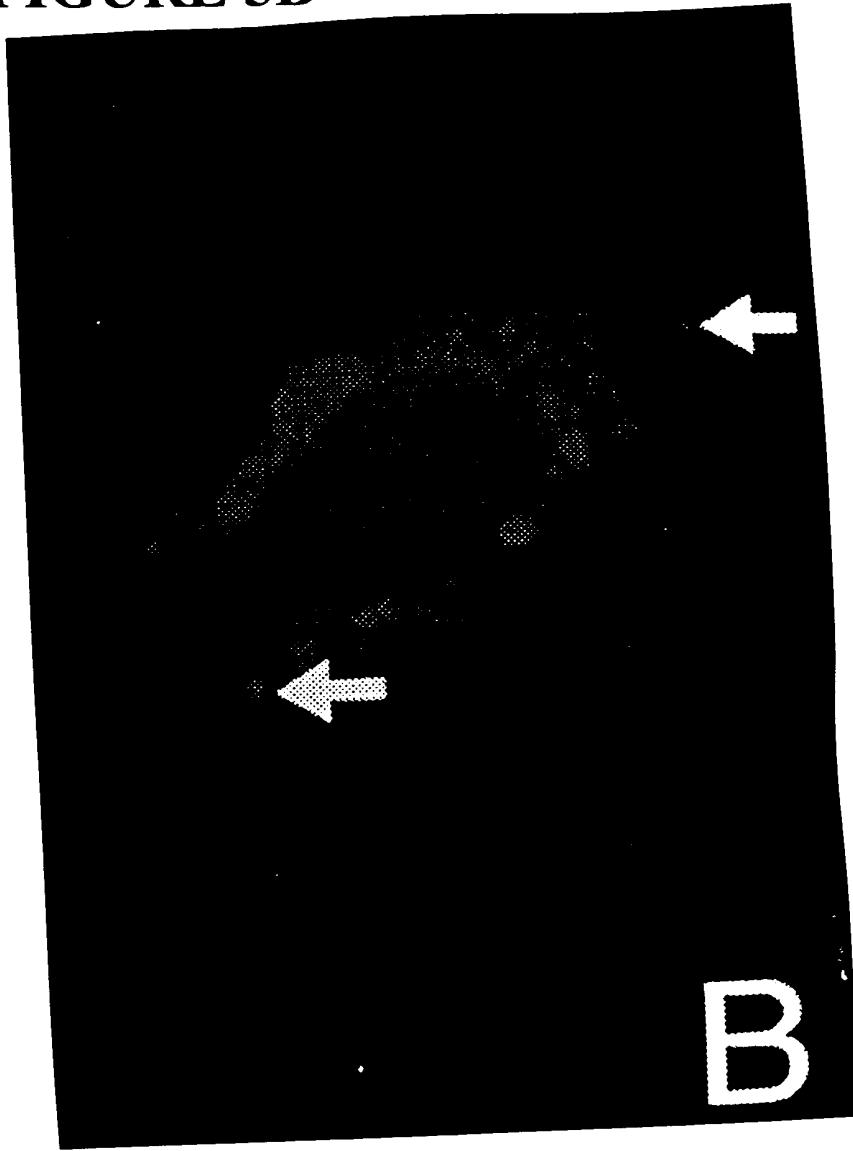
13/28

FIGURE 5A



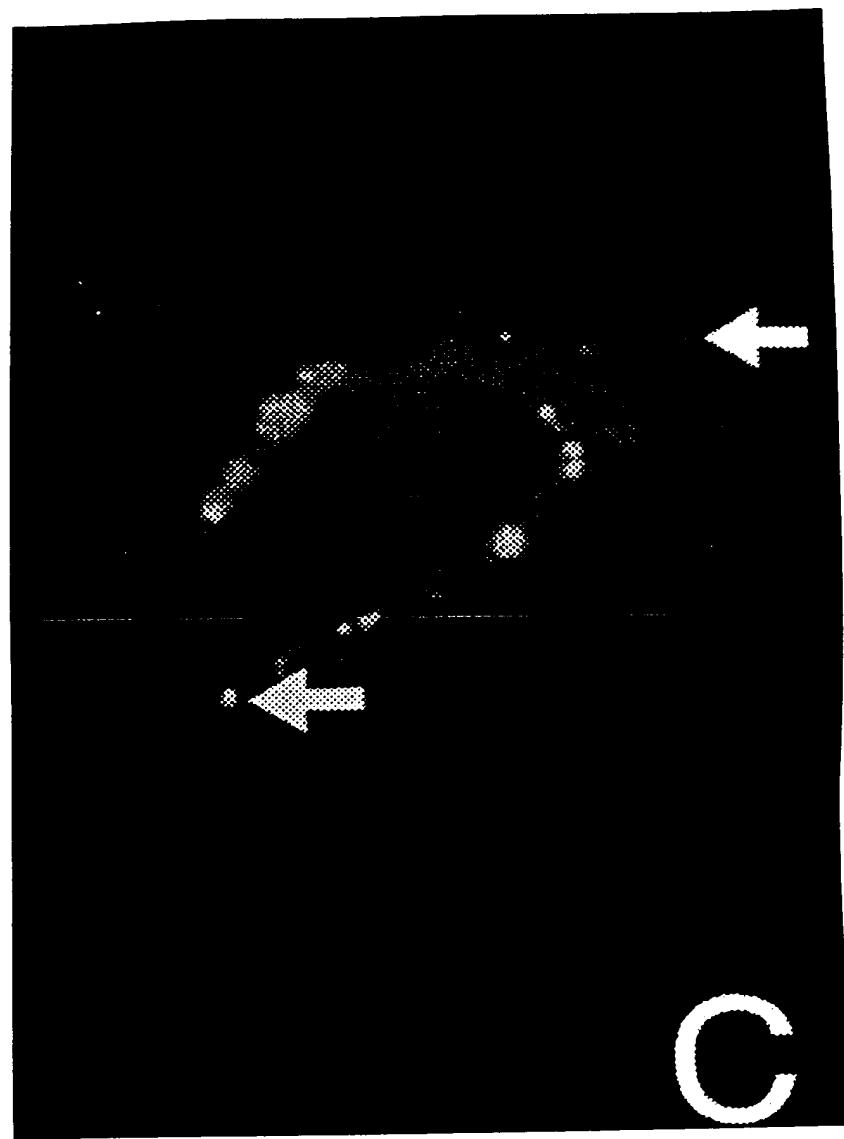
14/28

FIGURE 5B



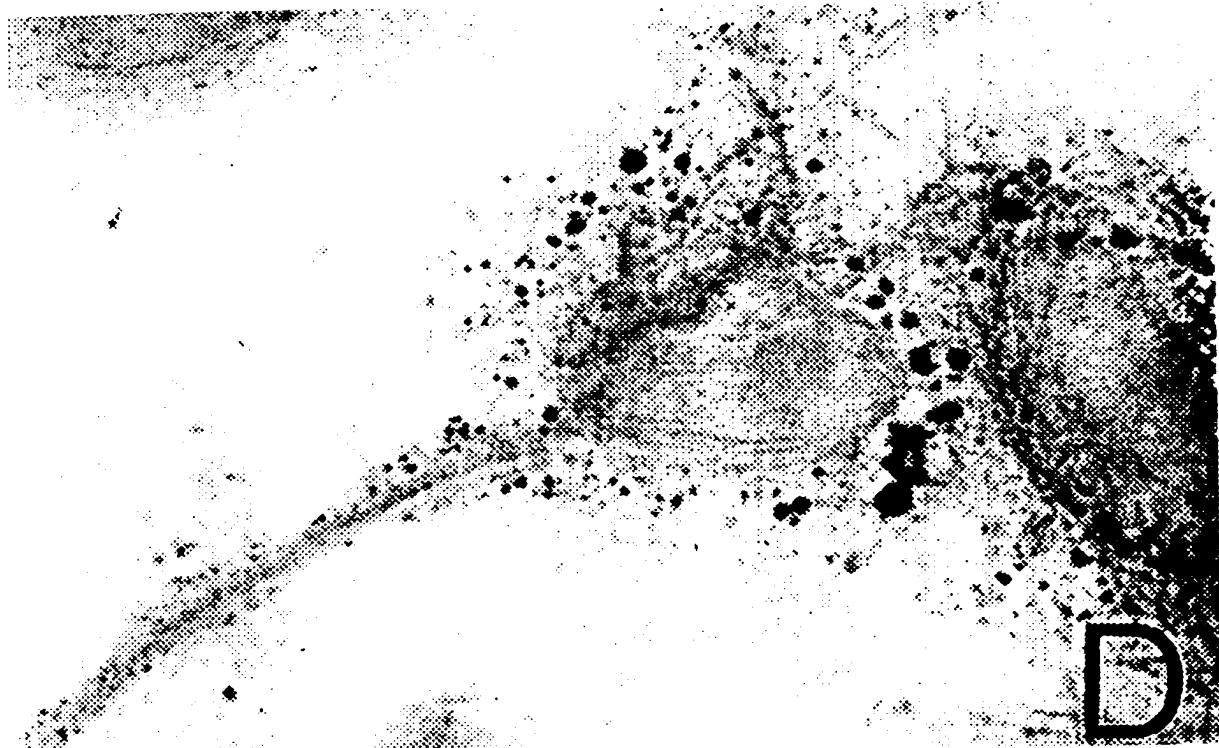
15/28

FIGURE 5C



16/28

FIGURE 5D



17/28

FIGURE 5E

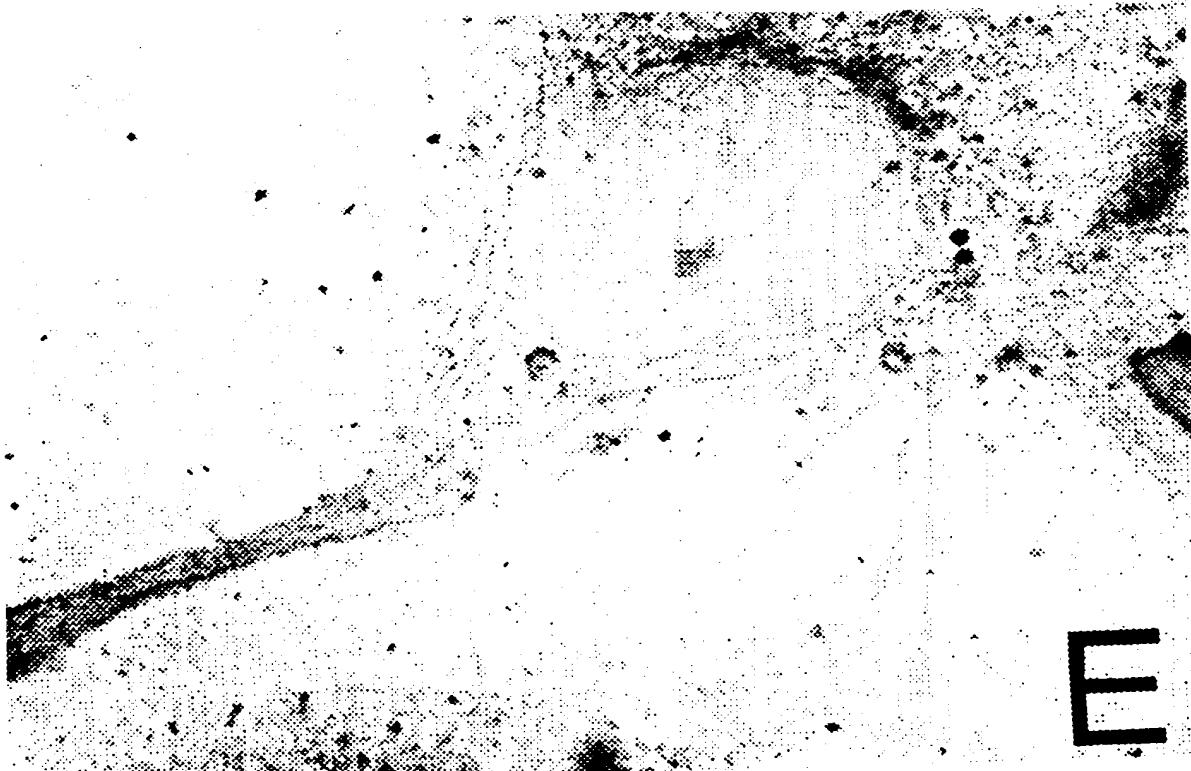


FIGURE 6-1

18/28

FIGURE 6-2

19/28

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 333 | CGC | GGT | TGT | AAC | GCG | GCT | CGA | GAA | CGG | TTT | GGG | TTT | TCA | CCC | TGC | CAA |
| CTC | ACA | CGC | GGT | AAC | GCG | GCT | CGA | GAA | CGG | TTT | GGG | TTT | TCA | CCC | TGC | CAA |
| L | T | R | A | C | N | A | A | R | E | R | F | G | F | S | R | C |
| G | P | P | V | D | G | A | V | E | T | T | G | A | E | I | C | T |
| 441 | CTT | GGA | TTA | GAG | CCA | AAT | ACA | ATA | TTA | TAC | TTG | GTG | GTC | ACG | GCA | TTT |
| L | G | L | E | P | E | N | T | I | L | Y | L | V | V | T | A | L |
| 495 | AAG | GAA | GCC | GTA | TTT | ATG | TGC | AAC | GTG | TTT | CTG | CAT | TAT | GGA | GGA | CTC |
| K | E | A | V | F | M | C | N | V | F | L | H | Y | G | G | L | D |
| 549 | GTT | CAT | ATT | AAC | CAT | GGG | GAT | GTT | ATA | CGT | ATA | CCG | TAA | TTT | CCG | GTA |
| V | H | I | N | H | G | D | Y | I | R | I | P | L | F | P | V | Q |
| 603 | TTC | ATG | CCC | GAT | GTT | AAC | CGT | CTG | GTA | CCC | GAC | CCA | TTC | AAC | ACT | CAT |
| F | M | P | D | V | N | R | L | V | P | D | P | F | N | T | H | H |

FIGURE 6-3

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TCT | ATC | GGA | GAG | GGT | TTT | GTA | TAC | CCA | ACA | CCC | TTT | TAT | AAC | ACC | GGC | TTC | TGC | |
| S | I | G | E | G | F | V | Y | P | T | P | F | Y | N | T | G | L | C | |
| | | | | | | | | | | | | | | | | | | |
| 711 | TTA | ATA | CAT | GAC | TGT | GTT | ATT | GCT | CCC | ATG | GCC | GTT | GCC | TTG | CGC | GTC | AGA | |
| H | L | I | R | D | C | V | I | A | P | M | A | V | A | L | R | V | R | |
| | | | | | | | | | | | | | | | | | | |
| 765 | ACT | CCC | GTC | GCC | CGA | CGA | GCC | GCC | GAC | GAC | CAC | CIT | GCT | TTT | GAT | GAA | AAT | |
| N | V | T | A | V | A | R | G | A | A | H | L | A | F | D | E | N | H | |
| | | | | | | | | | | | | | | | | | | |
| 819 | | | | | 828 | | | | 837 | | | 846 | | | 855 | | | 864 |
| GAC | GGC | GCA | GTA | CTC | CCC | CCT | GAC | ATT | ACG | TAC | ACG | TAT | TTT | CAG | TCC | TCT | TCA | |
| E | G | A | V | L | P | P | D | I | T | Y | T | Y | F | Q | S | S | S | |
| | | | | | | | | | | | | | | | | | | |
| 873 | | | | | 882 | | | | 891 | | | 900 | | | 909 | | | 918 |
| AGT | GGA | ACC | ACT | ACC | GCC | CGT | GGA | CGG | CCT | CGA | AAC | GAT | GTC | AAC | TCC | ACG | TCT | |
| S | G | T | T | T | A | R | G | A | R | R | N | D | V | N | S | T | S | |
| | | | | | | | | | | | | | | | | | | |
| 927 | | | | | | | | | 945 | | | 954 | | | 963 | | | 972 |
| AAG | CCT | AGC | CCA | TCG | GGG | GGG | TTT | GAA | AGA | CGG | TTG | GCG | TCT | ATT | ATG | GCC | GCT | |
| K | P | S | P | S | G | G | F | E | R | R | L | A | S | I | M | A | A | |
| | | | | | | | | | | | | | | | | | | |

20/28

FIGURE 6-4

| | | | | | | | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|--|
| GAC | ACA | GCC | TTC | CAC | GCA | GAA | GTT | ATA | TTC | AAC | ACT | GGG | ATT | TAC | GAA | GAA | ACT | 1026 | |
| D | T | A | L | H | A | E | V | I | F | N | T | G | I | Y | E | E | T | | |
| 1035 | | 1044 | | 1053 | | 1062 | | 1071 | | 1080 | | 1089 | | 1107 | | 1116 | | 1125 | |
| CCA | ACA | GAT | ATC | AAA | GAA | TGG | CCA | ATG | TTT | ATA | GCG | ATG | GAG | GGC | ACT | TTG | CCA | | |
| P | T | R | D | I | K | E | W | P | M | F | I | G | M | E | G | T | L | P | |
| 1089 | | 1098 | | 1107 | | 1116 | | 1125 | | 1134 | | 1143 | | 1161 | | 1170 | | 1179 | |
| AGG | CTA | AAC | GCT | CTG | GGG | TCA | TAT | ACC | GCT | CGT | GTC | GGC | GGG | GTC | ATT | GGT | GCG | | |
| R | L | N | A | L | G | S | Y | T | A | R | V | A | G | V | I | G | A | | |
| 1143 | | 1152 | | 1161 | | 1170 | | 1179 | | 1188 | | 1197 | | 1206 | | 1215 | | 1224 | |
| ATG | GTT | TTC | AGC | CCA | ATT | TCT | GCG | TTC | TAT | CTA | ACT | GAG | GTC | GAG | GAT | AGC | GGG | | |
| M | V | F | S | P | N | S | A | L | X | L | T | E | V | E | D | S | G | | |
| 1197 | | 1206 | | 1215 | | 1224 | | 1233 | | 1242 | | 1251 | | 1260 | | 1269 | | 1278 | |
| ATG | ACC | GAA | GCC | AAG | GAT | GGG | GGA | CGG | GGT | CCA | TCA | TTT | AAT | CGA | TTT | TAC | CAG | | |
| M | T | E | A | K | D | G | C | P | G | P | S | F | N | R | F | Y | Q | | |
| 1251 | | 1260 | | 1269 | | 1278 | | 1287 | | 1296 | | 1305 | | 1314 | | 1323 | | 1332 | |
| TTT | GCC | GGA | CCT | CAT | TTA | GCT | GCG | AAT | CCC | CAA | ACA | GAT | CCA | GAT | GGC | CAC | GTT | | |
| F | A | G | P | H | L | A | A | N | P | Q | T | D | R | D | G | H | V | | |
| 1305 | | 1314 | | 1323 | | 1332 | | 1341 | | 1350 | | 1350 | | 1350 | | 1350 | | 1350 | |
| CTA | TCC | AGT | CAG | TCT | ACG | GGT | TCA | AAC | ACA | GAG | TTT | AGC | GTC | GAT | TAT | TTC | | | |
| L | S | S | Q | S | T | G | S | S | N | T | E | F | S | V | D | Y | L | | |

21/28

FIGURE 6-5

| | | | | | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| GCA | CTC | ATT | TGT | GGA | TTT | GGA | GCA | CCC | CTG | TTC | GCG | CGA | CTG | CTT | TTT | TAT | TAT | CTA | 1404 |
| A | L | I | C | G | F | G | A | P | L | A | R | L | F | Y | L | | | | |
| E | R | C | D | A | G | A | F | T | G | G | H | G | D | A | L | K | Y | | |
| V | T | G | T | F | D | S | E | I | P | C | S | L | C | E | K | H | T | | |
| F | G | Q | A | T | R | Q | P | I | G | V | F | G | T | M | N | S | Q | | |
| Y | S | D | C | D | P | L | G | N | Y | A | P | Y | L | I | L | R | K | | |
| CCC | GGG | GAT | CAA | ACG | GAA | GCA | GCA | AAG | GCA | ACC | ATG | CAG | GAC | ACT | TAT | AGG | GCT | 1674 | |
| P | G | D | Q | T | E | A | A | K | A | T | M | Q | D | T | Y | R | A | 1728 | |
| 1683 | | | | | | | | | | | | | | | | | | | |
| 1629 | | | | | | | | | | | | | | | | | | | |
| 1359 | | | | | | | | | | | | | | | | | | | |
| 1368 | | | | | | | | | | | | | | | | | | | |
| 1377 | | | | | | | | | | | | | | | | | | | |
| 1386 | | | | | | | | | | | | | | | | | | | |
| 1395 | | | | | | | | | | | | | | | | | | | |
| 1413 | | | | | | | | | | | | | | | | | | | |
| 1422 | | | | | | | | | | | | | | | | | | | |
| 1431 | | | | | | | | | | | | | | | | | | | |
| 1440 | | | | | | | | | | | | | | | | | | | |
| 1449 | | | | | | | | | | | | | | | | | | | |
| 1458 | | | | | | | | | | | | | | | | | | | |
| GAA | CGC | TGT | GAC | GCT | GGT | GGG | TTT | ACA | GGG | GGG | GAT | GCG | TTA | AAA | TAT | | | | |
| GTT | ACG | GGG | ACC | TTC | GAC | TCT | GAA | ATT | CCA | TGT | AGT | TTA | TGT | GAA | AAA | CAC | ACG | | |
| R | P | V | C | A | H | T | T | V | H | R | L | R | Q | R | M | P | R | | |
| 1467 | | | | | | | | | | | | | | | | | | 1512 | |
| 1476 | | | | | | | | | | | | | | | | | | | |
| 1485 | | | | | | | | | | | | | | | | | | | |
| 1494 | | | | | | | | | | | | | | | | | | | |
| 1503 | | | | | | | | | | | | | | | | | | | |
| 1521 | | | | | | | | | | | | | | | | | | | |
| 1530 | | | | | | | | | | | | | | | | | | | |
| 1539 | | | | | | | | | | | | | | | | | | | |
| 1548 | | | | | | | | | | | | | | | | | | | |
| CCG | CCG | GTA | TGC | GCT | CAC | ACA | ACA | GTA | CAC | CGA | CTT | AGA | CAA | CGC | ATG | CCG | CGA | 1566 | |
| R | P | V | C | A | H | T | T | V | H | R | L | R | Q | R | M | P | R | | |
| 1575 | | | | | | | | | | | | | | | | | | | |
| 1584 | | | | | | | | | | | | | | | | | | | |
| 1593 | | | | | | | | | | | | | | | | | | | |
| 1602 | | | | | | | | | | | | | | | | | | | |
| 1611 | | | | | | | | | | | | | | | | | | | |
| 1620 | | | | | | | | | | | | | | | | | | | |
| TAT | AGC | TGC | GAT | CCT | CTA | GGA | AAC | TAT | GGG | GTG | TTT | GGA | ACA | ATG | AAC | AGC | CAA | 1620 | |
| Y | S | D | C | D | P | L | G | N | Y | A | P | Y | L | I | L | R | K | | |
| 1638 | | | | | | | | | | | | | | | | | | | |
| 1647 | | | | | | | | | | | | | | | | | | | |
| 1656 | | | | | | | | | | | | | | | | | | | |
| TAT | AGC | GAC | TGC | GAT | CCT | CTA | GGA | AAC | TAT | GCT | CCA | TAT | TTA | ATC | CIT | CGA | AAA | 1674 | |
| P | G | D | Q | T | E | A | A | K | A | T | M | Q | D | T | Y | R | A | 1728 | |

22/28

FIGURE 6-6

| | | | | | | |
|---|------|------|------|------|------|------|
| ACA CTA GAA CGC TTG TTT ATC GAT CTA GAA CAA GAG CGA CTA CTG GAT CGC GGT | 1737 | 1746 | 1755 | 1764 | 1773 | 1782 |
| T L E R L F I D L E Q E R L L D R G | | | | | | |
| GCC CCA TGT TCT TCC GAG GGA CTA TCG TCT GTC ATT CTG GAT CAT CCA ACG TTT | 1791 | 1800 | 1809 | 1818 | 1827 | 1836 |
| A P C S S E G L S S V I V D H P T F | | | | | | |
| CGT CCC ATA TTA GAC ACA CTG CGT GCG CGG CGT ATA GAA CAG ACA ACA CAA TTT | 1845 | 1854 | 1863 | 1872 | 1881 | 1890 |
| R R I L D T L R A R I E Q T T Q F | | | | | | |
| ATG AAA GTG TTG GTT GAG ACC CGC GAT TAT AAG ATC CGT GAA GGA TTA TCC GAA | 1899 | 1908 | 1917 | 1926 | 1935 | 1944 |
| M K V L V E T R D Y K I R E G L S E | | | | | | |
| GCC ACC CAT TCA ATG GCG TTA ACG TTT GAT CCA TAC TCA GGA GCA TTT TGT CCC | 1953 | 1962 | 1971 | 1980 | 1989 | 1998 |
| A T H S M A L T F D P Y S G A F C P | | | | | | |
| ATT ACC ATT TTT TTA GTT AAA CGA ACA CAC CTA GCC GTG GTA CAA GAC TTA GCA | 2007 | 2016 | 2025 | 2034 | 2043 | 2052 |
| I T N F L V K R T H L A V V Q D L A | | | | | | |

23/28

FIGURE 6-7

| | | | | | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| TTA | AGC | CAA | TGT | CAT | TGT | GTA | TTT | TAC | GGA | CAG | CAA | GTT | GAG | GGG | CGG | AAC | TTT | 2106 |
| L | S | Q | C | H | C | V | F | Y | G | Q | Q | V | E | G | R | N | F | |
| 2115 | 2124 | 2133 | 2142 | 2151 | 2160 | 2169 | 2178 | 2187 | 2196 | 2205 | 2214 | 2223 | 2232 | 2241 | 2250 | 2259 | 2268 | |
| CGT | AAC | CAA | TTC | CAA | CCT | GTT | TTG | CGG | CGG | CGT | TTT | GTT | GAC | CTG | TTT | AAT | GGG | |
| R | N | Q | F | Q | P | V | L | R | R | F | V | D | L | F | N | G | | |
| G | F | I | S | T | R | S | I | T | V | T | L | S | E | G | P | V | S | |
| A | P | N | P | T | L | G | Q | D | A | P | A | G | R | T | F | D | G | |
| 2277 | 2286 | 2295 | 2304 | 2313 | 2322 | 2331 | 2340 | 2349 | 2358 | 2367 | 2376 | 2385 | 2394 | 2403 | 2412 | 2421 | 2430 | |
| GAT | TTA | GCG | CGC | GTA | AGC | GTG | GAA | GTT | ATT | CGG | GAT | ATA | CGA | GTT | AAA | AAT | AGG | |
| D | L | A | R | V | S | V | E | V | I | R | D | I | R | V | K | N | R | |
| V | V | F | S | G | N | C | T | N | L | S | E | A | A | R | A | R | L | |

24/28

FIGURE 6-8

| | | | | | | |
|------|------|------|------|------|------|------|
| | 2439 | 2448 | 2457 | 2466 | 2475 | 2484 |
| GGG | GCC | CTA | GGG | TTC | TTC | TTC |
| C | T | A | C | T | A | C |
| G | A | L | G | F | L | K |
| M | P | N | S | K | S | P |
| 2493 | 2502 | 2511 | 2520 | 2529 | 2538 | |
| ATG | CCA | CCA | AAC | AGT | AAA | TCC |
| C | T | A | C | T | A | C |
| R | N | Q | M | P | A | D |
| 2547 | 2556 | 2565 | 2574 | 2583 | 2592 | |
| CGC | AAC | CAG | ATG | CCG | GCA | GAT |
| C | A | C | T | C | A | C |
| A | V | K | R | F | T | E |
| 2601 | 2610 | 2619 | 2628 | 2637 | 2646 | |
| GCT | GTT | AAA | CGG | TTC | ACC | GAA |
| C | T | A | T | A | T | A |
| P | T | C | I | G | E | Y |
| 2655 | 2664 | 2673 | 2682 | 2691 | 2700 | |
| CCA | ACC | TGC | ATA | CGA | GAA | TTA |
| C | T | C | T | C | A | T |
| Y | C | D | H | S | Q | Y |

25/28

FIGURE 6-9

| | | | | | | |
|------|---|---|-------------------------|-------------------------|------|------|
| | 2763 | 2772 | 2781 | 2790 | 2799 | 2808 |
| GCC | AGG CGC | CCG CGT GAC | CCA TCA TCC GTG CAT | TGG ATT CGT AAA GAT GTC | | |
| A | R | P | D | P | S | V |
| | | | | | H | W |
| | | | | L | I | R |
| | | | | | K | D |
| | | | | | V | |
| 2817 | 2826 | 2835 | 2844 | 2853 | 2862 | |
| ACG | TCC GCC | GCG GAC ATA GAA ACC CAA GCA AAG GCG | CTT CTT GAA AAA ACG GAA | | | |
| T | S | A | D | I | E | T |
| | | | | Q | A | K |
| | | | | A | L | L |
| | | | | | E | K |
| | | | | | T | E |
| 2871 | 2880 | 2889 | 2898 | 2907 | 2916 | |
| AAC | TTA CCC GAA TTA TGG | ACT ACC GCT TTT ACT TCA ACT CAT TTA GTC CGC CGC | | | | |
| N | L | P | E | L | W | T |
| | | | | T | A | F |
| | | | | | T | S |
| | | | | | H | T |
| | | | | | L | V |
| | | | | | R | R |
| | | | | | A | A |
| 2925 | 2934 | 2943 | 2952 | 2961 | 2970 | |
| GCC | ATG AAT CAA CGT CCC ATG GTC GTT TTA GGA ATA AGC ATT AGT AAA TAT CAC | | | | | |
| A | M | N | Q | R | P | M |
| | | | | | V | V |
| | | | | | L | G |
| | | | | | I | I |
| | | | | | S | I |
| | | | | | K | Y |
| | | | | | H | |
| 2979 | 2988 | 2997 | 3006 | 3015 | 3024 | |
| GGA | GCG GCA GGA AAC AAC CGC GTC GTT CAG GCA GGG AAT TCG AGC GGT TTA AAC | | | | | |
| G | A | A | G | N | N | R |
| | | | | V | F | Q |
| | | | | A | G | N |
| | | | | | W | S |
| | | | | | G | L |
| | | | | | N | N |
| 3033 | 3042 | 3051 | 3060 | 3069 | 3078 | |
| GGG | GGT AAA AAT GTC TGC CGG CTA TTT ACA TTT GAT CGC ACT CGC CGT TTT ATA | | | | | |
| G | G | K | N | V | C | P |
| | | | | | L | F |
| | | | | | F | T |
| | | | | | D | R |
| | | | | | R | T |
| | | | | | F | I |
| 3087 | 3096 | 3105 | 3114 | 3123 | 3132 | |
| ATA | GCA TGT CCT AGA CGA CGT TTT ATC TGC CCC GTA ACA GGT CCC TCG TCG GGA | | | | | |
| I | A | C | P | R | G | G |
| | | | | | I | C |
| | | | | | P | V |
| | | | | | T | T |
| | | | | | G | S |
| | | | | | S | S |

26/28

FIGURE 6-10

| | | | | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| AAT | CGA | GAA | ACC | ACC | CTA | TCC | GAC | CAA | GTT | CGC | GGT | ATA | ATT | GTC | AGT | GGC | GGG |
| N | R | E | T | T | L | S | D | Q | V | R | G | I | I | V | S | G | G |
| A | M | V | Q | L | A | I | Y | A | T | V | V | R | A | V | G | A | R |
| 3141 | 3150 | 3159 | 3159 | 3168 | 3168 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3177 | 3186 |
| GCC | ATG | GTT | CAA | TTA | GGC | ATA | TAC | GCC | ACG | GTT | GTC | CGT | GCA | GTG | GGC | GCT | CGA |
| A | Q | H | M | A | F | D | D | W | L | S | L | T | D | D | E | F | L |
| 3249 | 3258 | 3267 | 3267 | 3276 | 3276 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3285 | 3240 |
| GCA | CAA | CAT | ATG | GCA | TTT | GAC | GAC | TGG | TTA | AGT | CTT | ACA | GAC | GAT | GAG | TTT | TTA |
| A | Q | H | M | A | F | D | D | W | L | S | L | T | D | D | E | F | L |
| 3303 | 3312 | 3321 | 3321 | 3330 | 3330 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3339 | 3348 |
| GCC | AGA | GAC | TTC | GAG | TTA | CAC | GAC | CAG | ATT | ATC | CAA | ACC | CTG | GAA | ACG | CCC | |
| A | R | D | L | E | E | L | H | D | Q | I | I | Q | T | L | E | T | P |
| 3357 | 3366 | 3375 | 3375 | 3384 | 3384 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3393 | 3402 |
| TGG | ACC | GTA | GAA | GGC | GCT | CTA | GAA | GCA | GTA | AAG | ATT | CTA | GAT | GAA | AAA | ACG | ACA |
| W | T | V | E | G | A | L | E | A | V | K | I | L | D | E | K | T | T |
| 3411 | 3420 | 3429 | 3429 | 3438 | 3438 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3447 | 3456 |
| GCG | GGA | GAT | GGG | GAA | ACC | CCC | ACA | AAC | CTA | GCA | TTT | ATT | GAT | TCT | TGT | TGT | GAA |
| A | G | D | G | E | T | P | T | N | L | A | F | N | F | D | S | C | E |

27/28

FIGURE 6-11

| | | | | | |
|------|------|------|------|------|------|
| 3465 | 3474 | 3483 | 3492 | 3501 | 3510 |
| CCA | CAT | GAC | ACC | ACA | TCT |
| AAC | TTA | AAC | GTA | TTA | AAC |
| P | S | H | D | T | S |
| 3519 | 3528 | 3537 | 3546 | 3555 | 3564 |
| GGG | TCA | ACT | GTC | CCT | GGT |
| TCA | AAA | CTT | AAA | CGA | CCC |
| G | S | T | V | P | G |
| 3573 | 3582 | 3591 | 3600 | 3609 | |
| CTT | AGT | GGT | ATT | CCC | ATA |
| AGC | AAA | CAT | GGG | AAC | ATT |
| L | S | G | I | P | I |
| | | | K | H | G |
| | | | | N | I |
| | | | | T | M |
| | | | | E | M |

28/28